



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/471,357      | 12/23/1999  | SHINJI NABESHIMA     | 2406-3              | 7310             |

7590 03/28/2007  
DONALD R STUDEBAKER  
SIXBEY FRIEDMAN LEEDOM & FERGUSON PC  
8180 GREENSBORO DRIVE  
SUITE 800  
MCLEAN, VA 22102

|          |
|----------|
| EXAMINER |
|----------|

BOCCIO, VINCENT F

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2165

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 03/28/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/471,357

Applicant(s)

NABESHIMA ET AL.

Examiner

Vincent F. Boccio

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 89-109 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 89-109 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 2165

**DETAILED ACTION**

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2165.

***Response to Arguments***

1. Applicant's arguments filed 1/11/07 have been fully considered but they are not persuasive.

{A} In re pages 2-4, applicant states, "claims 98,99 and 100 are clearly recites statutory subject matter in compliance with guidelines for examination."

In response the signal claims are not deemed to be statutory as previously stated, in view of being a form of energy, even if the signal contains functional descriptive data and non-functional descriptive data and the relationship between still based on current guidelines and understanding are not statutory, therefore the 101 rejection is maintained.

{B} In re page 4, applicant states, "the combination proposed by the examiner neither discloses nor remotely suggest ... claimed invention", and "changing reproduction control based upon a comparison of recording time, place, device information and reproduction time, place or device information."

It is noted that claim 1 recites, comparison of recording time and reproduction time", recording time information is stream time in the video and reproduction time is the table with time and interactive overlay, which changes reproduction control of interactive data, providing interactive data at times based on the video stream time and the reproduction time table, thereby enabling interactive playback or changing reproduction control of interactive contents based on a time table.

Butler and Gerba provide for this table as previously discussed, also Gerba changes the playback reproduction control base on Fig. 3, providing overlays or actionable events based on time data of the stream vs. stored table, thereby changing reproduction control of interactive overlays or actionable events presented to the user based on stream time, generated at the recoding time and time data of the interactive reproduction control data, at specified times, even windows in time (Fig. 3, Gerba, also see user interaction based on Fig. 5, step 80), which Butler does substantially the same, but, Gerba allows for recording and thereafter reproduction.

Art Unit: 2165

Claim 90, is also rejected because, place information meets the limitation and reads on time information which does identify places in the stream to trigger overlays.

Claim 91, recording device information and reproduction device information, also reads on time information for the device.

{C} In re page 5, applicant states, "Clearly, in accordance with Applicants claimed invention, the display is varied based on the recording time, or device which is directly contrary to that set fourth by Butler."

In response the examiner fails to agree, Butler does compare stream time vs. time table and also Gerba does the same to just that, "the display is varied based on the recording time", by providing overlays or actionable events, as claimed.

#### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Office Gazette notice of 22 November 2005), Annex IV, reads as follows:

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or a strength of a magnetic field, define energy or magnetism, per se, and as such as non-statutory natural phenomena. O'Reilly, 56 US (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101.

A signal does not fall within one of the four statutory classes of Sec. 101.

Signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec 101.

Art Unit: 2165

Claims 98-100 are rejected under 35 U.S.C. 101 because the claimed inventions are directed to non-statutory subject matter as follows.

Claims 98-100, define a carrier wave or signal with descriptive material embodies on a carrier wave, while descriptive material may be claimed as a statutory product when embodies on a tangible computer readable medium, a carrier wave or signal embodying that same functional descriptive material is neither a process nor a product (i.e. a tangible, "thing") and therefore, does not fall within one of the four statutory classes of 101. Rather, a carrier wave or signal is a form of energy, in the absence of any physical structure or tangible material.

It is noted that applicant has viewed the 3 references used in the rejection below, wherein the examiner maintains the grounds of rejection.

**Claim Rejections - 35 USC § 103**

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2165

2. Claims 89-109 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butler et al. (US 2002/0007493, FD 7/1997) and Gerba et al. (US 5,931,908) in view of Eyer et al. (US 5,982,445).

Regarding claims 89-91, 101-109, Butler discloses and meets the limitations associated with a transmission device and method for generating a carrier wave, the transmission that transmits a stream including content data wherein transmission device that generates a the carrier wave comprises:

- a transmitter (Fig. 1, "12"), that transmits a stream including content (Fig. 2, Video & audio), claims 101, 104, 107; and
- data for changing reproduction control based on, a comparison of recording time/place information and reproduction time/place information (page 4, col. 2 "Timing information indicates times, relative to the video stream, at which particular overlays should be displayed wherein the stream can be from a local storage device,
- page 5, col. 2, lines 60-, "local storage ... DVD", therefore, the DVD timing information represents recording time information or time information, with respect to overlay times or a table (page 4, col. 2, line 47-) to trigger the overlay or changing the control content during reproduction by comparing the {specific overlay times} with timing information associated with for example the DVD playback time data, claims 103, 106, and 109,
- thereby providing overlays triggered based on time information with respect to local playback timing, such as a DVD, wherein at page 4, col. 2, lines 48-, "The timing information indicate times ... at which particularly overlays should be displayed. Hyperlinks can be activated to override the specific timing."), wherein at page 5 col. 2, line 60-, "the movie might by provided on a DVD, with the overlays files being downloaded from an internet source.

Art Unit: 2165

Butler triggers overlays for a real time received signal or a playback of a video signal from a media, wherein the interactive overlays are downloaded from the broadcaster's transmitter, but, Butler fails to disclose

- recording the video-audio stream and wherein the
- transmitter transmits a transport stream and
- wherein the transmitted content and table of overlay data further includes, an instruction being an IF statement, claim 102 & 108.

It is further noted that Butler uses an instruction of programming, in the form of IF statements to facilitate comparison of the media time code with the corresponding overlay time information or code to trigger the overlays, IF the times are coincident and causing a changing of reproduction control (clickable or selectable (page 4, [0047-0060]), interactive overlays) by providing overlays with video content Figs. 4-5, page 2, col. 1, [0019], lines 6-9.

Gerba teaches col. 10, lines 14-, recording a program and related interface data and overlay function sets ... store in transportable media by an appropriate recording/reproduction device, lines 27-33, as taught by Gerba.

Therefore, it would have been obvious to those skilled in the art at the time of the invention to modify Butler by recording the content, being audio and video to an appropriate recording and reproduction device, as taught by Gerba, being an alternative to being provided with media having recorded thereon the content, as in Butler and to render overlays based on received and rendered video-audio stream (no playback or recording), or already stored media with video-audio signal already on the media.

Eyer et al. teaches providing hyperlink markup language protocol for TV display and control, wherein in Fig. 1, the HTML/HTVP 110 is multiplexed at 115 and the data is transmitted in accord to MPEG packetized digital transport stream (col. 8, lines 12-19), by 120, received at 155 to 160 to 180 being a decoder and TV to facilitate control of systems with the HTML/HTVP programming, which in view of the controls provided provides for determine IF, one of control button has been selected, Fig. 5, which IF is used to determine IF a user has

Art Unit: 2165

interacted with a control or a comparison used to determines, IF a button has been selected, based on the programming instructions provided being in the form of HTML/HTVP programming, as taught by Eyer.

Therefore, it would have been obvious to those skilled in the art at the time of the invention to modify Butler to transmit content of audio and video with overlay information on an MPEG 2 Transport stream, as having advantages that the MPEG 2 transport stream is advantageous in error prone environments such as satellite transmissions as done in Butler, as taught by Eyer.

Furthermore, it would have been obvious to those skilled in the art at the time of the invention to modify the combination by also transmitting code in the form of HTML/HTVP to facilitate controlled comparison with downloaded programming instructions to facilitate the process of the instructions including at least an IF type statement or code, for facilitating the comparison process or control process of triggering overlays IF, the times of steams and overlay data, the downloading of programming code to facilitate control functions as taught by Eyer, as is deemed obvious to those skilled in the art, that programming code can be included in transmission to facilitate control functions, as taught by Eyer.

Claims 92-100, have been analyzed and discussed with respect to the claims above, but, as applied fails to address the limitation of transmitted in repetitive fashion a plurality of times, is deemed met by the combination with Butler, upon a user or even multiple users, one user retrieving the table more than once or multiple user requests would cause the group of interactive control data or the table of times and overlays would be retrieved and transmitted in repetitive fashion a plurality of times based in the requests from one or multiple users over time.

#### **Conclusion**

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any



Art Unit: 2165

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

**Contact Information**

Any inquiry concerning this communication or earlier communications should be directed to the examiner of record Vincent F. Boccio whose telephone number is (571) 272-7373.

The examiner can normally be reached on between Monday thru Friday between (7:30 am to 5:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272-4146.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Primary Examiner, Boccio, Vincent  
3/27/07

  
VINCENT BOCCIO  
PRIMARY EXAMINER